PATENT Application No.: 10/565,082 Customer No. 30734

Docket No.: 59482.21880

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the

application:

(Currently Amended) An aircraft having a fuselage comprising an outer 1.

skin, said aircraft comprising:

a cargo compartment of said aircraft, said a cargo deck being adapted to receive loads and

comprising a plurality of floor modules, which are fixed within the cargo compartment and

define said cargo deck, and

a plurality of longitudinal profiles attached to said outer skin, and

a plurality of intermediate elements, wherein

each of said floor modules comprises a plurality of transverse beams that extend

across of a width of said aircraft, each end of said transverse beams resting on an upper

surface of a respective one of said longitudinal profiles;

wherein each of said floor modules comprises at least a first and a second

transverse beams that extend across of a width of said aircraft, each end of said

transverse beams resting on an upper surface of a respective one of said longitudinal

profiles,

each of said floor modules comprises a plurality of profile elements that extend

in a longitudinal direction of said aircraft along a respective upper surface of at least

one of said floor modules, said profile elements providing a mount for at least one

element selected from the group comprising transport rollers and latches, said plurality

of profile elements comprising at least one peripheral profile located at an edge region

of the respective floor module proximate to said outer skin; and

said at least one peripheral profile is connected to said outer skin by means of at

least one of said a plurality of intermediate elements such that forces in said

longitudinal direction of said aircraft are transferred from said at least one peripheral

profile to said outer skin, whereas forces perpendicular to said longitudinal direction of

said aircraft are transferred only very slightly to said outer skin by said intermediate

elements.

2. (Currently Amended) Cargo deck according to claim-1, wherein a plurality of

ribs are fixed to said outer skin, and said longitudinal beams are fixed to said ribs.

An aircraft having a fuselage comprising an outer skin, said aircraft comprising:

a cargo compartment being adapted to receive loads and comprising a plurality of

floor modules, which are fixed within the cargo compartment and define a cargo deck,

<u>and</u>

a plurality of longitudinal profiles attached to said outer skin,

wherein each of said floor modules comprises at least a first and a second

transverse beams that extend across of a width of said aircraft, each end of said

transverse beams resting on an upper surface of a respective one of said longitudinal

profiles,

**PATENT** Application No.: 10/565,082

Docket No.: 59482.21880 Customer No. 30734

each of said floor modules comprises a plurality of profile elements that extend

in a longitudinal direction of said aircraft along a respective upper surface of at least

one of said floor modules, said plurality of profile elements comprising at least one

peripheral profile located at an edge region of the respective floor module proximate to

said outer skin; and

said at least one peripheral profile is connected to said outer skin by means of a

plurality of intermediate elements such that forces in said longitudinal direction of said

aircraft are transferred from said at least one peripheral profile to said outer skin,

whereas forces perpendicular to said longitudinal direction of said aircraft are

transferred only very slightly to said outer skin by said intermediate elements, wherein

said transverse beam having at least one supporting foot configured and adapted to be

fastened to the fuselage of said aircraft at a bottom region of said aircraft, the

supporting foot being adapted to transmit vertical loads on the floor modules to the

fuselage.

3. (Currently Amended) Cargo deck according to claim-1, wherein said longitudinal

beams are comprised of a material that has a coefficient of thermal expansion which corresponds

substantially to that of said outer skin.

An aircraft having a fuselage comprising an outer skin, said aircraft comprising:

a cargo compartment being adapted to receive loads and comprising a plurality of

floor modules, which are fixed within the cargo compartment and define a cargo deck,

and

a plurality of longitudinal profiles attached to said outer skin,

wherein each of said floor modules comprises at least a first and a second

transverse beams that extend across of a width of said aircraft, each end of said

transverse beams resting on an upper surface of a respective one of said longitudinal

profiles,

each of said floor modules comprises a plurality of profile elements that extend

in a longitudinal direction of said aircraft along a respective upper surface of at least

one of said floor modules, said plurality of profile elements comprising at least one

peripheral profile located at an edge region of the respective floor module proximate to

said outer skin; and

said at least one peripheral profile is connected to said outer skin by means of a

plurality of intermediate elements such that forces in said longitudinal direction of said

aircraft are transferred from said at least one peripheral profile to said outer skin,

whereas forces perpendicular to said longitudinal direction of said aircraft are

transferred only very slightly to said outer skin by said intermediate elements, wherein

at least one of said longitudinal beams and said ribs comprise at least one of bores,

rapid-closure elements and similar fixation devices for attachment of the floor modules

thereto.

4. (Currently Amended) Cargo deck according to claim 1, wherein at least one of said longitudinal beams and said ribs comprise at least one of bores, rapid-closure elements and similar fixation devices for attachment of the floor modules thereto.

An aircraft having a fuselage comprising an outer skin, said fuselage comprising multiple barrel-shaped fuselage sections, said aircraft comprising:

a cargo compartment being adapted to receive loads and comprising a plurality of floor modules, which are fixed within the cargo compartment and define a cargo deck, and

a plurality of longitudinal profiles attached to said outer skin,

wherein each of said floor modules comprises at least a first and a second transverse beams that extend across of a width of said aircraft, each end of said transverse beams resting on an upper surface of a respective one of said longitudinal profiles, each of said floor modules comprises a plurality of profile elements that extend in a longitudinal direction of said aircraft along a respective upper surface of at least one of said floor modules, said plurality of profile elements comprising at least one peripheral profile located at an edge region of the respective floor module proximate to said outer skin; and

said at least one peripheral profile is connected to said outer skin by means of a plurality of intermediate elements such that forces in said longitudinal direction of said aircraft are transferred from said at least one peripheral profile to said outer skin,

whereas forces perpendicular to said longitudinal direction of said aircraft are transferred only very slightly to said outer skin by said intermediate elements.

- 5. (Cancelled)
- 6. (Cancelled)
- 7. (Cancelled)
- 8. (Cancelled)
- 9. (Cancelled)
- 10. (Original) Cargo deck according to claim 1, wherein said modules are decoupled from one another with respect to forces acting in the long direction of the aircraft.
- 11. (Withdrawn) Method of installing a cargo deck in an aircraft composed of multiple barrel-shaped fuselage sections of an outer skin, comprising the steps of a) providing a plurality of floor modules; b) providing a plurality of longitudinal beams each with a means for attaching said floor modules to the longitudinal beams; c) fixing said longitudinal beams within said fuselage sections of said aircraft; d) inserting said floor modules into said fuselage sections and attaching them to said longitudinal beams.
- 12. (Withdrawn) Method according to claim 11, wherein said longitudinal beams each have a length no greater than that of said fuselage section within which it is located.

13. (Withdrawn) Method according to claim 11, wherein said transverse beams

comprise feet and a plurality of ribs are fixed to said outer skin, and comprising the additional

steps of e) fixing said feet of said transverse beams to said ribs.

14. (Withdrawn) Method according to claim 13, comprising the additional steps of

providing wall and ceiling lining elements, pushing same into said fuselage sections and fixing

same in position therein.

15. (Withdrawn) Method according to claim 11, wherein after assembly of said

fuselage sections, each of said floor modules is loaded into said aircraft through a cargo-

compartment door, transported to its destination, and fixed in position.

16. (Withdrawn) Method according to claim 11, wherein prior to the step d) said

floor modules are provided with conductor means through which at least one of fluids, electrical

current, and an electrical lead can pass, and said conductor means are connected to one another

after the step c).

17. (Withdrawn) Method according to claim 13, wherein at least one of parts of floor

panels, ball mats and similar deck sections for said floor of the modules are fixed to said floor

modules after the step e).

18. (Withdrawn) A cargo deck assembly for providing a cargo deck for a cargo

compartment of an aircraft, said aircraft having a fuselage with an outer skin, comprising:

a first longitudinal beam configured and adapted to be mounted to said fuselage

proximate to said outer skin such that said first longitudinal beam extends, in a longitudinal

direction of said aircraft, along a first side of said cargo compartment;

a second longitudinal beam configured and adapted to be mounted to said fuselage

proximate to said outer skin such that said second longitudinal beam extends, in a longitudinal

direction of said aircraft, along a second side of said cargo compartment opposite said first side

of said cargo compartment; and

at least one floor module having a first end and a second, opposite end, said floor module

being configured and adapted to be mounted in said aircraft such that said first end rests on an

upward-facing surface of said first longitudinal beam and said second end rests on an upward-

facing surface of said second longitudinal beam, wherein

each of said floor modules comprises a substantially planar upper surface that

extends from a location proximate to said first longitudinal beam to a location

proximate to said second longitudinal beam..

19. (Withdrawn) The cargo deck assembly of claim 18, wherein said floor module is

configured and adapted to be mounted in said aircraft such that said first end rests on said

upward-facing surface of said first longitudinal beam and said second end rests on said upward-

facing surface of said second longitudinal beam when each of said first and second longitudinal

beams is mounted to said fuselage at a location that is proximate to an upper, cargo-bearing

surface of said at least one floor module when said at least one floor module is mounted in said

aircraft.

20. (Withdrawn) A cargo deck assembly for an aircraft having a fuselage, comprising:

a first support element;

a second support element; and

at least one floor module comprising a transverse support element and at least one cargo deck floor element, wherein

said transverse support element has a first end and a second, opposite end, said first end is mounted to said fuselage solely via said first support element, and said second end is mounted to said fuselage via said second support element.

- 21. (Withdrawn) The cargo deck assembly of claim 20, wherein at least one of said first and second support elements is formed integrally with said fuselage.
- 22. (Withdrawn) The cargo deck assembly of claim 20, wherein at least one of said first and second support elements is a beam mounted to said fuselage so as to extend in a longitudinal direction of said aircraft.
- 23. (Withdrawn) The cargo deck assembly of claim 20, wherein said first support element matingly receives said first end and said second support element matingly receives said second end.
- 24. (Withdrawn) The cargo deck assembly of claim 20, wherein each of said first and second support elements has an upward-facing planar surface and said transverse support element has a downward-facing planar surface at each of said first and second ends, said

downward-facing planar surface at said first end supportedly resting on said upward-facing

planar surface of said first support element and said downward-facing planar surface at said

second end supportedly resting on said upward-facing planar surface of said second support

element.

25. (Withdrawn) An aircraft comprising:

a fuselage having an outer skin;

a cargo deck comprising at least one floor module having a substantially planar,

cargo-bearing surface that extends from a first end of said floor module to a second,

opposite end of said floor module;

a first longitudinal beam mounted to said fuselage proximate to said outer skin

and proximate to said cargo-bearing surface, said first longitudinal beam extending, in a

longitudinal direction of said aircraft, along a first side of a cargo compartment of said

aircraft; and

a second longitudinal beam mounted to said fuselage proximate to said outer skin

and proximate to said cargo-bearing surface, said second longitudinal beam extending,

in a longitudinal direction of said aircraft, along a second side of said cargo

compartment opposite said first side of said cargo compartment, wherein

said floor module being mounted in said aircraft such that said first end rests on

an upward-facing surface of said first longitudinal beam and said second end rests on an

upward-facing surface of said second longitudinal beam.

26. (Withdrawn) A cargo deck for a cargo compartment of an aircraft with an outer

skin, said cargo deck being adapted to receive loads and comprising a plurality of floor modules,

which are fixed within the cargo compartment and define said cargo deck, and a plurality of longitudinal beams attached to said outer skin on which said floor modules are mounted, wherein

said floor modules each comprise at least one transverse beam connecting said floor module to said longitudinal beams, and

said transverse beam having at least one supporting foot configured and adapted to be fastened to a fuselage of said aircraft proximate to a bottom region of said aircraft.

27. (Withdrawn) The cargo deck assembly of claim 18, wherein transverse beam comprises at least two supporting feet configured and adapted to be fastened to said fuselage proximate to a bottom central region of said aircraft.

## 28. (Withdrawn) The cargo deck assembly of claim 18, wherein

said at least one floor module has at least one transverse beam that spans across an interior width of said fuselage in a direction substantially perpendicular to a longitudinal direction of said aircraft, and

said transverse beam has a first end and a second, opposite end, said floor module being configured and adapted to be mounted in said aircraft such that said first end rests on said upward-facing surface of said first longitudinal beam and said second end rests on said upward-facing surface of said second longitudinal beam.

29. (Withdrawn) The aircraft of claim 25, wherein said at least one floor module is mounted to said aircraft in such a way that substantially no forces acting in said longitudinal direction of said aircraft can be transferred from said floor modules into said longitudinal beams.

30. (Withdrawn) The cargo deck assembly of claim 20, wherein said transverse support element comprises at least one supporting portion that extends to a bottom portion of said aircraft.

## 31. (Withdrawn) The aircraft of claim 25, wherein

said at least one floor module has at least one transverse beam that spans across an interior width of said fuselage in a direction substantially perpendicular to a longitudinal direction of said aircraft, and

said transverse beam has a first end and a second, opposite end, said floor module being configured and adapted to be mounted in said aircraft such that said first end rests on said upward-facing surface of said first longitudinal beam and said second end rests on said upward-facing surface of said second longitudinal beam.

- 32. (Previously Presented) The aircraft of claim 1, wherein
- a bottom surface of said at least one peripheral profile abuts an upper surface of said at least one of said plurality of intermediate elements.
- 33. (Previously Presented) The aircraft of claim 1, wherein said longitudinal profiles and said intermediate elements are manufactured from a sheet material.
- 34. (New) An aircraft having a fuselage comprising an outer skin, said fuselage comprising multiple barrel-shaped fuselage sections, said aircraft comprising:

a cargo compartment being adapted to receive loads and comprising a plurality of

floor modules, which are fixed within the cargo compartment and define a cargo deck,

and

a plurality of longitudinal profiles attached to said outer skin,

wherein each of said floor modules comprises at least a first and a second

transverse beams that extend across of a width of said aircraft, each end of said

transverse beams resting on an upper surface of a respective one of said longitudinal

profiles, wherein said transverse beams comprise at least one of either bores and rapid-

closure elements for attaching said floor modules to said longitudinal profiles;

each of said floor modules comprises a plurality of profile elements that extend

in a longitudinal direction of said aircraft along a respective upper surface of at least

one of said floor modules, said plurality of profile elements comprising at least one

peripheral profile located at an edge region of the respective floor module proximate to

said outer skin; and

said at least one peripheral profile is connected to said outer skin by means of a

plurality of intermediate elements such that forces in said longitudinal direction of said

aircraft are transferred from said at least one peripheral profile to said outer skin,

whereas forces perpendicular to said longitudinal direction of said aircraft are

transferred only very slightly to said outer skin by said intermediate elements, wherein

at least one of said longitudinal beams and said ribs comprise at least one of bores,

rapid-closure elements and similar fixation devices for attachment of the floor modules thereto.